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IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF OREGON

AUDUBON SOCIETY OF PORTLAND, WILDLIFE DEFENSE FUND, CENTER FOR BIOLOGICAL DIVERSITY, FRIENDS OF ANIMALS,

Plaintiffs,

No. 3:15-cv-665-SI

DECLARATION OF MICHELLE MCDOWELL

v.

U.S. ARMY CORPS OF ENGINEERS, U.S. FISH AND WILDLIFE SERVICE, USDA WILDLIFE SERVICES,

Defendants.

I, Michelle McDowell, declare as follows:

- 1. I am a Wildlife Biologist with the Migratory Birds and Habitat Program for the U.S. Fish and Wildlife Service (Service), Pacific Region. I specialize in waterbird management and conservation. I provide technical recommendations and perform biological reviews for permit applications. In this capacity, I am the primary contact to the Army Corps of Engineers (Corps) in the development of the Double-crested Cormorant Management Plan to Reduce Predation of Juvenile Salmonids in the Columbia River Estuary. I've held this position since May 2012.
- 2. I am familiar with the Corps' migratory bird depredation permit application, as well as the Record of Decision (ROD) prepared by my office regarding the Corps' Depredation Permit Associated with Double-Crested Cormorant Management Plan to Reduce Predation of Juvenile Salmonids in the Columbia River Estuary, and the depredation permit issued by my office to the Corps on April 13, 2015. I am also familiar with the lawsuit filed by the Audubon Society and others on April 20, 2015. My responsibilities include assembling a complete administrative record for the U.S. Fish and Wildlife Service in response to this lawsuit.
- 3. I have reviewed Plaintiffs' Motion For Preliminary Injunction and the declarations filed in support of that motion. This declaration focuses on the harm to the western population of Double-crested Cormorants by issuance of the requested depredation permit associated with implementing Year 1 management, as described in Chapter 5 of the Double-crested Cormorant Management Plan to Reduce Predation of Juvenile Salmonids in the Columbia River Estuary Final Environmental Impact Statement (FEIS). I will also respond to arguments of harm presented in the declaration of Linda Wires, but I will not respond to arguments regarding the merits of the agency's actions.

Current status of the western population and effect of implementing Year 1 of the Corps' management plan on that population.

4. Double-crested Cormorants are distributed across North America and their abundance has increased dramatically in North America since the 1960s and 1970s. The western population has also substantially increased in recent years. From approximately 1987-2009, the number of breeding pairs estimated in British Columbia, Washington, Oregon, and California increased by 72 percent (3% per year), or 12,000 breeding pairs. Available information shows that the entire

western population has itself increased by approximately 2.04 percent per year over the last two decades, and, based on recently released data, is now 38,018 breeding pairs (76,036 breeding individuals). [CORPS ROD at 8]. The 2014 estimate for the East Sand Island colony was 13,626 breeding pairs. *Id*.

- 5. The depredation permit issued on April 13, 2015 expires on January 31, 2016. Accordingly, it allows for the first year of implementation of the Corps' Management Plan. It authorizes the lethal take of 3,489 Double-crested Cormorants, 105 Brandt's Cormorant, and 10 Pelagic Cormorants. It also authorizes the active nest destruction of 5,879 Double-crested Cormorants.
- 6. Based on my experience as a Wildlife Biologist, as well as my familiarity with the Corps' Management Plan and this species of birds, and a consideration of available data and information, I conclude that issuance of the depredation permit, and implementation of the first year of the Corps' Management Plan, will not result in irrevocable harm to the western population of Double-crested Cormorants.
- 7. Succinctly, a sustainable population is one that does not have a long-term negative population trajectory. *See* Service's ROD, page 5 and Appendix A, Page 21; Corps' ROD, Appendix A, Page 4-7. The Service has determined that a "sustainable population" is "a population that is able to maintain a long-term trend with numbers above a level that would not result in a major decline or cause a species to be threatened or endangered." Service's ROD, Appendix A, Page 21.
- 8. Based on the past population trend and the current number of active colonies, the Service has concurred with the conclusion that the western population is sustainable around 41,660 breeding individuals, which approximately equals ca. 1990 abundance for the population. The ca. 1990 population level is "a" sustainable population level. *See* Corps' ROD, Appendix A, Page 5-7. The Service did not identify a "minimum" sustainable population level; rather, we determined that the ca. 1990 population would be sustainable. Other, perhaps lower, population levels might also be sustainable, but were not analyzed.
- 9. Critically, the long-term population trend is the determining factor for sustainability and whether a population will potentially become threatened. The population, post-management, is predicted to be approximately 45,000 breeding individuals at year 20. (FEIS, Appendix E-2, Table E-2 3 and Figure E-2 2). *See* Service's ROD, Appendix A, Page 21.

10. While I disagree with the notion that sustainability is properly measured in the short-term, even assuming that consideration were proper, one year of implementing the Corps' management plan also will not cause the population to fall below 41,660 breeding individuals. As noted above, the current western population is 76,036 breeding individuals. I have seen no evidence and do not conclude that the lethal take and nest destruction in 2015 would have a significant impact on the population, or cause it to drop to the point where it approaches the ca. 1990 population level.

Responses to the declaration of Linda Wires.

- 11. In paragraphs 6 through 8, Ms. Wires offers statements and opinions that do not address the issue of harm. I will limit my responses to her claims of alleged harm.
- 12. In paragraph 9, Ms. Wires expresses "great concern" to the population that harm "could result from the proposed actions." Ms. Wires suggests that "elimination of the number of birds specified in the Corps' management plan runs a significant risk of having detrimental impacts on the entire western population." The same underlying assumption—that harm may result from implementation of the management plan in its entirety—is offered in paragraphs 11, 12 and the duplicate paragraph 12. This assumption is flawed because the depredation permit is limited to one year, and thus allows only the implementation of the first year of the Corps' plan. Accordingly, while Ms. Wires opines about the potential impacts from the implementation of the management plan as a whole, that is not the proper measure of harm in this context.
- 13. In paragraph 11, Ms. Wires states that it will be "impossible to avoid accidentally shooting many Brandt's Cormorants while shooting up to 11,000 DCCOs." The fact that Ms. Wires references 11,000 Double-Crested Cormorants again shows that she is improperly describing harm over the course of the 4 years of implementation of Phase I of the Corps' management plan. This is inappropriate measure of harm in this context, as described in the above paragraph. Moreover, to minimize the threat of misidentification, shooters would receive species identification training, and individual(s) or biologist(s) trained in species identification would be present when lethal take occurs to minimize take due to misidentification (i.e., Brandt's and Pelagic cormorants). Species would be identified prior to shooting. If there is a high concentration of non-target species in the area, these areas would be avoided. *See* Service's ROD, Page 20.

- 14. In addition, the FEIS and Service's ROD describe the effects of the management plan to other birds, including the potential for Brandt's Cormorants to be taken due to misidentification. The Corps' FEIS describes the effects of Alternative C-1 on the regional populations of both Brandt's and Pelagic cormorants (sections 4.2.3 and 4.2.4). Based on past studies, the Corps predicts that some Brandt's and Pelagic cormorants will be taken as misidentified Double-crested Cormorants (FEIS, Chapter 4, Section 4.2.3).
- 15. To account for this potential take of Brandt's and Pelagic cormorants, the Corps conservatively estimated that 3.0 percent of the cormorants lethally taken might be misidentified Brandt's Cormorants. Ms. Wires does not present evidence that contradicts this estimated rate of misidentification. Using this conservative estimate, in year one, 105 Brandt's Cormorants (3,489 Double-crested Cormorants multiplied by 0.03), the amount authorized under the Service's depredation permit, would be taken. The regional population of Brandt's Cormorants is estimated at 74,000 birds (FEIS, Chapter 3, Section 3.2.3), so the take of 105 Brandt's in year one amounts to 0.4 percent (105/74,000) of the regional population. I do not believe that this reduction would irrevocably harm the population.
- 16. Even if the appropriate measure were the entire course of the 4 years of implementation, I still do not believe irrevocable harm to the population is likely. If 3 percent of the cormorants culled annually are Brandt's Cormorants, this amounts to potentially 327 Brandt's Cormorants being taken over the course of the 4 years of implementation (105, 93, 72, and 57 in years 1-4, respectively), or about 0.45 percent of the regional population (327/74,000). This level of take would reduce the size of the Brandt's Cormorant colony on East Sand Island, but would likely have negligible effects on the regional population (FEIS, Chapter 4, Section 4.2.3). Based on this level of effect on the regional population, the Service concluded that issuing a depredation permit to include 105 Brandt's Cormorants is compatible with their conservation and the proposed take does not have potential to threaten the regional population of Brandt's Cormorants." See Service's ROD, Page 22.
- 17. In paragraph 12, Ms. Wires states that she has "great concern about the stability of the colony and potential for abandonment" The Service considered that issue. The potential for colony abandonment is analyzed in the FEIS (Chapter 4, page 12 and 21) and further addressed in FEIS, Appendix J, S-24, Page 42. We concur with the statement "The adaptive management strategies for alternatives C, C-1 and D identify dispersal thresholds to reduce or minimize the

potential for colony abandonment." *See* FEIS, Appendix J, S-24, Page 42. I do not believe Ms. Wires has offered any additional evidence that undermines that conclusion.

18. Ms. Wires also expresses concern about gull predation. Wires Decl. ¶ 12. I do not believe that Ms. Wires' discussion shows that implementing year one of the Corps' management plan will irrevocably harm these birds. The Service and the Corps examined this issue. Gull predation as a result of a mass flushing response is described in the FEIS, Chapter 2, Page 3. "Detailed Adaptive Management thresholds, best management practices and impact avoidance measures, and extensive monitoring, and formation and evaluation of future management actions through an Adaptive Management Team (AMT) are described extensively throughout the FEIS (see Chapter 2, Chapter 4, and Chapter 5) to reduce the potential for the scenario and effect described." See Corps' ROD, Appendix A, Page 5. I do not believe Ms. Wires has offered any additional evidence that undermines that conclusion.

Typical nesting chronology and current status of Double-crested and Brandt's cormorants on East Sand Island.

19. Typically, the first Double-crested Cormorants arrive on the East Sand Island breeding colony between March 27 and April 11. *See* FEIS, Chapter 4, Page 36. First egg has been observed April 21 through May 5; first chick May 21 through June 2; first fledgling July 5-July 22; and peak adult attendance is typically in early June. *Id.* Through personal communication with the Corps' project manager, I understand that Double-crested Cormorants and eggs were observed on April 22, 2015. Several hundred Double-crested Cormorants were present and incubation behavior was observed. Brandt's Cormorants were present at that time but no eggs were observed.

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct. Executed on this 6^{th} day of May, 2015 at Portland, Oregon.

MICHELLE MCDOWELL

Wildlife Biologist, Migratory Birds and Habitat

Programs